



2124  
Patent  
Docket No. 254/254; OI7011402001  
OID-2000-031-01

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Alok K. SRIIVASTAVA et al.

Serial No.: 09/872,647

Filed: May 31, 2001

For: METHOD AND MECHANISM FOR  
DIAGNOSING COMPUTER  
APPLICATIONS USING TRACES

Group Art Unit: 2124

Examiner: Satish Rampuria

### SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

02/28/2005 SSESHE1 00000025 502518 09872647

Sir:

01 FC:1806 180.00 DA

In accordance with 37 CFR §§ 1.97 and 1.98, the items identified in this Supplemental Information Disclosure Statement (“IDS”) are brought to the attention of the Office. The items are listed on the attached form PTO/SB/08b.

The items identified in this IDS may or may not be “material” pursuant to 37 CFR § 1.56. The submission thereof by Applicants is not to be construed as an admission that any such patent, publication or other information referred to therein is material or considered to be material (37 CFR § 1.97(h)), or even qualifies as “prior art” under 35 USC § 102 with respect to this invention unless specifically designated by Applicants as such.

#### 1. Timing of the Information Disclosure Statement:

This IDS is believed to be timely in that it is being submitted under 37 CFR § 1.97(b), that is (1) within three months of the filing date of the application, which is not a continued prosecution application filed under § 1.53(d) or (2) within three months of entry of the national stage as set forth in 37 CFR § 1.491; or (3) before the mailing of a first Office action on the merits; or (4) before the mailing of a first Office action after filing a request for continued examination under § 1.114. Thus, no fee is required.

However, if the undersigned is in error in this regard, Applicant respectfully requests that the Office consider this IDS as filed under 37 CFR § 1.97(c), if applicable, and charge the fee due under 37 CFR § 1.17(p) to the deposit account referenced below.

- However, if the undersigned is in error in this regard, Applicant respectfully requests that the Office consider this IDS as filed under 37 CFR § 1.97(c), if applicable, and a statement under 37 CFR § 1.97(e) is included below, thus no fee is required.
- This IDS is being submitted under 37 CFR § 1.97(c), that is after mailing of a first Office Action on the merits, but before a Final Action under 37 CFR § 1.113 or a Notice of Allowance under 37 CFR § 1.311.
  - The fee due under 37 CFR § 1.17(p) is submitted herewith.
  - The fee due under 37 CFR § 1.17(p) is being concurrently submitted with the filing of an electronic IDS submission. Thus, no additional fee is required.
  - A statement under 37 CFR § 1.97(e) is included below, thus no fee is required. In the event that this IDS is not received before a Final Action or a Notice of Allowance, then Applicant respectfully requests that the Office consider the filing of these papers to be submitted under 37 CFR § 1.97(d) and charge the fee due under 37 CFR § 1.17(p) to the deposit account below.
- This IDS is being submitted under 37 CFR § 1.97(d), that is after a Final Action under 37 CFR § 1.113 or a Notice of Allowance under 37 CFR § 1.311, but before payment of the issue fee. A statement under 37 CFR § 1.97(e) is included below. The fee due under 37 CFR § 1.17(p) is submitted herewith.
- This IDS is being submitted under 37 CFR § 1.97(i), that is after a Final Action under 37 CFR § 1.113 or a Notice of Allowance under 37 CFR § 1.311, but before payment of the issue fee.

**STATEMENT UNDER 37 CFR § 1.97(e):**

- Some items contained in this IDS were cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS.
- No item contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this statement after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 CFR § 1.56(c) more than three months prior to the filing of this IDS.

**2. Copies of the Cited Items:**

- Copies of all of the items listed on the attached form PTO/SB/08b are enclosed.
- Copies of only the following items listed on the attached forms PTO/SB/08a and PTO/SB/08b are enclosed.
- Copies of the following documents listed in PTO/SB/08a and copies of the following documents listed in PTO/SB/08b were previously cited by the Office or submitted in Information Disclosure

Statements in related applications: and accordingly, copies are not included herewith.

See 37 C.F.R. § 1.98(d). The Examiner is requested to make these documents of record.

**3. Concise Explanation of Relevance:**

- A concise explanation of relevance of the items listed on form PTO/SB/08b is not given.
- A concise explanation of relevance of some of the items listed on forms PTO/SB/08a and PTO/SB/08b is in the form of an English language copy of a Search Report from a foreign patent office, issued in a counterpart application, which refers to the relevant portions of the references (copy attached).

**4. Related Applications:**

- Applicant(s) bring to the Office's attention the following related application(s):  
U.S. Patent Application Serial Nos. 09/872,590 filed on May 31, 2001, and 10/208,120, 10/208,129 and 10/209,612 all filed July 29, 2002.

**5. Conclusion:**

Citation of the above documents shall not be construed as:

1. an admission that the documents are necessarily prior art with respect to the instant invention;
2. a representation that a search has been made, other than as described above; and
3. an admission that the information cited herein is, or is considered to be, material to patentability as defined in § 1.56(b).

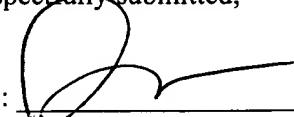
It is respectfully requested that the Examiner indicate consideration of the cited references by returning a copy of the attached forms PTO/SB/08a and PTO/SB/08b with initials or other appropriate marks. In the unlikely event that the transmittal letter is separated from this document and the U.S. Patent Office determines that an extension and/or other relief is required, Applicants petition for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 50-2518

referencing 7011402001. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: 7/23/05

Respectfully submitted,

By:

  
Peter C. Mei  
Registration No. 39,768

Bingham McCutchen LLP  
Three Embarcadero Center, Suite 1800  
San Francisco, California 94111-4067  
Telephone: (650) 849-4400  
Facsimile: (650) 849-4800



Substitute for form 1449B/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

1

1

**Complete if Known**

Application Number	09/872,647
Filing Date	May 31, 2001
First Named Inventor	Alok SRIVASTAVA
Art Unit	2124
Examiner Name	Satish Rampuria

Attorney Docket Number 254/254; OI7011402001

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
	1	BISWAS, P. et al. "Trace Driven Analysis of Write Caching Policies for Disks" <i>Proceedings of the 1993 ACM SIGMETRICS Conference on Measurement and Modeling of Computer Systems</i> (1993) pp. 13-23	
	2	BORG, A. et al. "Generation and Analysis of Very Long Address Traces" <i>Proceedings of the 17<sup>th</sup> Annual International Symposium on Computer Architecture</i> (May 1990) 18(3):270-279	
	3	CHANG, P. P. and W.-M. W. HWU "Trace Selection for Compiling Large C Application Programs to Microcode" <i>Proceedings of the 21<sup>st</sup> Annual Workshop on Microprogramming and Microarchitecture</i> (Jan. 1988) pp. 21-29	
	4	COLBY, C. and P. LEE "Trace-Based Program Analysis" <i>Proceedings of the 23<sup>rd</sup> ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages</i> (Jan. 1996) pp. 195-207	
	5	DAN, A. et al. "Characterization of Database Access Pattern for Analytic Prediction of Buffer Hit Probability" <i>VLBD Journal</i> (1995) 4:127-154	
	6	DUCASSÉ, M. "Coca: An automated Debugger for C" <i>Proceedings of the 21<sup>st</sup> International Conference on Software Engineering</i> (May 1999) pp. 504-513	
	7	EZUST, S.A. and G. v. BOCHMANN "An Automatic Trace Analysis Tool Generator for Estelle Specifications" <i>Proceedings of the Conference on Applications, Technologies, Architectures and Protocols for Computer Communication</i> (Oct. 1995) 25(4):175-184	
	8	GOLDSZMIDT, G. S. and S. YEMINI "High-Level Language Debugging for Concurrent Programs" <i>ACM Transactions on Computer Systems (TOCS)</i> (Nov. 1990) 8(4):311-336	
	9	HSU, W. W. et al. "I/O Reference Behavior of Production Database Workloads and the TPC Benchmarks - An Analysis at the Logical Level" <i>ACM Transactions on Database Systems (TODS)</i> (Mar. 2001) 26(1):96-143	
	10	LeDOUX, C. H. and D. S. PARKER, Jr. "Saving Traces for ADA Debugging" <i>Proceedings of the 1985 Annual ACM SIGAda International Conference on Ada</i> (May 1985) V(2):97-108	
	11	LENCEVICIUS, R. et al. "Third Eye - Specification-Based Analysis of Software Execution Traces" <i>Proceedings of the 22<sup>nd</sup> International Conference on Software Engineering</i> (June 2000) p. 772	
	12	LO, J. L. et al. "An Analysis of Database Workload Performance on Simultaneous Multithreaded Processors" <i>Proceedings of the 25<sup>th</sup> Annual International Symposium on Computer Architecture</i> (Apr. 1998) 26(3):39-50	
	13	MILLER, B.P. and J.-D. CHOI "A Mechanism for Efficient Debugging of Parallel Programs" <i>Proceedings of the ACM SIGPLAN 1998 Conference on Programming Language Design and Implementation</i> (June 1998) pp. 135-144	
	14	PUTRYCZ, E. "Using Trace Analysis for Improving Performance in COTS Systems" <i>Proceedings of the 2004 Conference of the Centre for Advanced Studies on Collaborative Research</i> (Oct. 2004) pp. 1-13	
	15	RAHM, E. "Empirical Performance Evaluation of Concurrency and Coherency Control Protocols for Database Sharing Systems" <i>ACM Transactions on Database Systems (TODS)</i> (June 1993) 18(2):333-377	
	16	RAMAKRISHNAN, K. K. "Analysis of File I/O Traces in Commercial Computing Environments" <i>Proceedings of the 1992 ACM SIGMETRICS Joint International Conference on Measurement and Modeling of Computer Systems</i> (June 1992) 20(1):78-90	
	17	REISS, S.P. and M. RENIERIS "Generating Java Trace Data" <i>Proceedings of the ACM 2000 Conference on Java Grande</i> (June 2000) pp. 71-77	
	18	SINGHAL, V. and A.J. SMITH "Analysis of locking behavior in three real database systems" <i>The VLDB Journal</i> (1997) 6:40-52	

Examiner Signature		Date Considered	
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\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. This information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

FEB 25 2005

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Effective on 12/08/2004.

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

# FEE TRANSMITTAL for FY 2005

Applicant claims small entity status. See 37 CFR 1.27

**TOTAL AMOUNT OF PAYMENT** (\$ 180)

**Complete If Known**

Application Number	09/872,647
Filing Date	May 31, 2001
First Named Inventor	Alok K. SRIVASTAVA
Examiner Name	Satish Rampuria
Art Unit	2124
Attorney Docket No.	254/254; OI7011402001

**METHOD OF PAYMENT** (check all that apply)

Check  Credit Card  Money Order  None  Other (please identify) : \_\_\_\_\_

Deposit Account Deposit Account Number: 502518 Deposit Account Name: Bingham McCutchen LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

Charge fee(s) indicated below  Charge fee(s) indicated below, except for the filing fee  
 Charge any additional fee(s) or underpayments of fee(s)  Credit any overpayments

Under 37 CFR 1.16 and 1.17

**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**FEE CALCULATION**
**1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

<b>Application Type</b>	<b>FILING FEES</b>		<b>SEARCH FEES</b>		<b>EXAMINATION FEES</b>		
	<b>Small Entity</b>	<b>Fee (\$)</b>	<b>Small Entity</b>	<b>Fee (\$)</b>	<b>Small Entity</b>	<b>Fee (\$)</b>	<b>Fees Paid (\$)</b>
Utility	300	150	500	250	200	100	_____
Design	200	100	100	50	130	65	_____
Plant	200	100	300	150	160	80	_____
Reissue	300	150	500	250	600	300	_____
Provisional	200	100	0	0	0	0	_____

**2. EXCESS CLAIM FEES**
**Fee Description**

Each claim over 20 (including Reissues)

**Small Entity**

**Fee (\$)** **Fee (\$)**

50 25

Each independent claim over 30 (including Reissues)

200 100

Multiple dependent claims

360 180

**Total Claims**

**Extra Claims**

**Fee (\$)**

**Fee Paid (\$)**

**Multiple Dependent Claims**

**Fee (\$)** **Fee Paid (\$)**

-20 or HP= \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

HP = highest number of total claims paid for, if greater than 20.

**Indep. Claims**

**Extra Claims**

**Fee (\$)**

**Fee Paid (\$)**

- 3 or HP= \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

HP = highest number of independent claims paid for, if greater than 3.

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

<b>Total Sheets</b>	<b>Extra Sheets</b>	<b>Number of each additional 50 or fraction thereof</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>
- 100 = _____	/ 50 = _____	(round up to a whole number)	x	= _____

**4. OTHER FEE(S)**

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge) : Submission of Information Disclosure Statement

**180**

**SUBMITTED BY**

Signature		Registration No. (Attorney/Agent)	39,768	Telephone	650-849-4400
Name (Print/Type)	Peter C. Mei			Date	February 2, 2005

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



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PTO/SB/21 (09-04)  
Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission **7** Attorney Docket Number **254/254; OI701142001**

### ENCLOSURES (check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Form PTO/SB/08b (1 page); 18 references; postcard receipt
<b>Remarks</b>		

### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm	Bingham McCutchen LLP		
Signature			
Printed Name	Peter C. Mei		
Date	February <u>23</u> , 2005	Reg. No.	39,768

### CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Signature			
Typed or printed name	Mary R. Zimmerman	Date	February <u>23</u> , 2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.